

We claim:

- class 423
1. A functionalized silica, having at least one functional group fixed on the surface of said silica, the group being selected from the group consisting of 3-methacryloxypropylsilyl, glycidyloxypropylsilyl and mixtures thereof.
  - 5 2. The functionalized silica according to Claim 1 wherein the silica is produced by flame hydrolysis.
  3. A process for the preparation of the functionalized silica according to Claim 1, comprising spraying a silica optionally first with water or dilute acid and then with a surface modification reagent or a mixture of surface modification reagents in a mixing vessel, with intensive mixing, optionally re-mixing said silica for 15 to 30 minutes and heating at a temperature of 100 to 400 °C over a period of 1 to 6 h.
  - 10 4. The process according to Claim 3 wherein the surface modification agent is a member selected from the group consisting of 3-methacryltrialkoxysilane, glycidylottrialkoxysilane and mixtures thereof.
  - 15 5. A surface coating with a coating containing the functionalized silica according to Claim 1.
  6. A coating composition comprising the functionalized silica of Claim 1 and a solvent.
  7. A coating composition for preparing a scratch resistant coating on a surface, comprising the functionalized silica according to Claim 1 and a polyurethane.
- class 523